



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/955,572	10/22/1997	BYOUNG S. KWON	IND4-DI1B	7472
23643 7590 08/24/2007 BARNES & THORNBURG LLP 11 SOUTH MERIDIAN INDIANAPOLIS, IN 46204				
EXAMINER LANDSMAN, ROBERT S				
ART UNIT		PAPER NUMBER		
1647				
MAIL DATE		DELIVERY MODE		
08/24/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 08/955,572	Applicant(s) KWON, BYOUNG S.	
	Examiner Robert Landsman, Ph.D.	Art Unit 1647	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,6,24 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 5,6,24,26,28,29 and 31 is/are rejected.
- 7) ☒ Claim(s) 27 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Formal Matters

A. Claims 5, 6, 24 and 26-31 are pending and are the subject of this Office Action.

2. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002, do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

A. Claims 5, 6, 24 and 26, 28, 29 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodwin et al. (US 7,211,259). The claims recite a protein of SEQ ID NO:2, an extracellular domain thereof and compositions comprising the protein. Goodwin teach a protein 100% identical to SEQ ID NO:2 (see Sequence Comparison A below), which comprises the extracellular fragment. Goodwin also teach compositions (claims 1-18). The rejection of claims 27 and 30 are not being maintained since Goodwin et al. do not teach a nucleic acid sequence 100% identical to those of SEQ ID NO:1, 2, 7 or 8 of the instant invention (see Sequence Comparison B below).

Art Unit: 1647

SEQUENCE COMPARISON A

```

; Sequence 8, Application US/08060843A
; GENERAL INFORMATION:
;   APPLICANT: Goodwin, Raymond G.
;   APPLICANT: Smith, Craig A.
;   TITLE OF INVENTION: Cytokine Designated 4-1BB Ligand And
;   TITLE OF INVENTION: Human Receptor That Binds Thereto
;   NUMBER OF SEQUENCES: 15
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Kathryn A. Seese, Immunex Corporation
;     STREET: 51 University Street
;     CITY: Seattle
;     STATE: Washington
;     COUNTRY: US
;     ZIP: 98101
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: IBM PC compatible
;     OPERATING SYSTEM: PC-DOS/MS-DOS
;     SOFTWARE: PatentIn Release #1.0, Version #1.25
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/060,843A
;     FILING DATE: 19930507
;     CLASSIFICATION: 530
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Seese,, Kathryn A.
;     REGISTRATION NUMBER: 32,172
;     REFERENCE/DOCKET NUMBER: 2801-A
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (206) 587-0430
;     TELEFAX: (206) 233-0644
;   INFORMATION FOR SEQ ID NO: 8:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH: 255 amino acids
;       TYPE: amino acid
;       TOPOLOGY: linear
;     MOLECULE TYPE: protein
US-08-060-843A-8

```

```

Query Match          100.0%;  Score 1415;  DB 1;  Length 255;
Best Local Similarity 100.0%;  Pred. No. 0;
Matches 255;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

```

```

Qy      1  MGNSCYNIVATLLLVLNFETRSLQDPCSNCPAGTFCDNNRNQICSPCPPNSFSSAGGQR 60
      |||
Db      1  MGNSCYNIVATLLLVLNFETRSLQDPCSNCPAGTFCDNNRNQICSPCPPNSFSSAGGQR 60

Qy     61  TCDICRQCKGVFRTRKECSSTSNAECDCTPGFHCLGAGCSMCEQDCKQGQELTKKGCKDC 120
      |||
Db     61  TCDICRQCKGVFRTRKECSSTSNAECDCTPGFHCLGAGCSMCEQDCKQGQELTKKGCKDC 120

Qy    121  CFGTFNDQKRGICRPWTNCSLDGKSVLVNGTKERDVVCGPSPADLSPGASSVTPPAPARE 180
      |||
Db    121  CFGTFNDQKRGICRPWTNCSLDGKSVLVNGTKERDVVCGPSPADLSPGASSVTPPAPARE 180

Qy    181  PGHSPQIISFFLALTSTALLFLLFFLTLRFSVVKRGRKKLLYIFKQPFMRPVQTTQEEDG 240
      |||
Db    181  PGHSPQIISFFLALTSTALLFLLFFLTLRFSVVKRGRKKLLYIFKQPFMRPVQTTQEEDG 240

```

Art Unit: 1647

Qy 241 CSCRFPEEEEGGCEL 255
 |||
 Db 241 CSCRFPEEEEGGCEL 255

SEQUENCE COMPARISON B

; Sequence 7, Application US/08060843A

Query Match 99.8%; Score 836.4; DB 1; Length 1415;

Best Local Similarity 99.9%; Pred. No. 2e-84;

Matches 837; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AATCAGCTTTGCTAGTATCATACCTGTGCCAGATTTTCATCATGGGAAACAGCTGTTACAA 60
 |||
 Db 80 AATCAGCTTTGCTAGTATCATACCTGTGCCAGATTTTCATCATGGGAAACAGCTGTTACAA 139

Qy 61 CATAGTAGCCACTCTGTTGCTGGTCCTCAACTTTGAGAGGACAAGATCATTGCAGGATCC 120
 |||
 Db 140 CATAGTAGCCACTCTGTTGCTGGTCCTCAACTTTGAGAGGACAAGATCATTGCAGGATCC 199

Qy 121 TTGTAGTAAGTACCCAGCTGGTACATTCTGTGATAATAACAGGAATCAGATTTGCAGTCC 180
 |||
 Db 200 TTGTAGTAAGTACCCAGCTGGTACATTCTGTGATAATAACAGGAATCAGATTTGCAGTCC 259

Qy 181 CTGTCCTCCAAATAGTTTCTCCAGCGCAGGTGGACAAAGGACCTGTGACATATGCAGGCA 240
 |||
 Db 260 CTGTCCTCCAAATAGTTTCTCCAGCGCAGGTGGACAAAGGACCTGTGACATATGCAGGCA 319

Qy 241 GTGTAAAGGTGTTTTCAGGACCAGGAAGGAGTGTTCCTCCACCAGCAATGCAGAGTGTGA 300
 |||
 Db 320 GTGTAAAGGTGTTTTCAGGACCAGGAAGGAGTGTTCCTCCACCAGCAATGCAGAGTGTGA 379

Qy 301 CTGCACTCCAGGGTTTCACTGCCTGGGGGCAGGATGCAGCATGTGTGAACAGGATTGTAA 360
 |||
 Db 380 CTGCACTCCAGGGTTTCACTGCCTGGGGGCAGGATGCAGCATGTGTGAACAGGATTGTAA 439

Qy 361 ACAAGGTCAAGAACTGACAAAAAAGGTTGTAAAGACTGTTGCTTTGGGACATTTAACGA 420
 |||
 Db 440 ACAAGGTCAAGAACTGACAAAAAAGGTTGTAAAGACTGTTGCTTTGGGACATTTAACGA 499

Qy 421 TCAGAAACGTGGCATCTGTGACCCCTGGACAAACTGTTCTTTGGATGGAAAGTCTGTGCT 480
 |||
 Db 500 TCAGAAACGTGGCATCTGTGACCCCTGGACAAACTGTTCTTTGGATGGAAAGTCTGTGCT 559

Qy 481 TGTGAATGGGACGAAGGAGAGGGACGTGGTCTGTGGACCATCTCCAGCTGACCTCTCTCC 540
 |||
 Db 560 TGTGAATGGGACGAAGGAGAGGGACGTGGTCTGTGGACCATCTCCAGCTGACCTCTCTCC 619

Qy 541 GGGAGCATCCTCTGTGACCCCGCTGCCCTGCGAGAGAGCCAGGACACTCTCCGCAGAT 600
 |||
 Db 620 GGGAGCATCCTCTGTGACCCCGCTGCCCTGCGAGAGAGCCAGGACACTCTCCGCAGAT 679

Qy 601 CATCTCCTTCTTTCTTGCGCTGACGTGCGTGTGCTCTTCTGCTGTTCTTCTCTCAC 660
 |||
 Db 680 CATCTCCTTCTTTCTTGCGCTGACGTGCGTGTGCTCTTCTGCTGTTCTTCTCTCAC 739

Art Unit: 1647

Qy 661 GCTCCGTTTCTCTGTTGTTAAACGGGGCAGAAAGAACTCCTGTATATATTCAAACAACC 720
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 740 GCTCCGTTTCTCTGTTGTTAAACGGGGCAGAAAGAACTCCTGTATATATTCAAACAACC 799
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Qy 721 ATTTATGAGACCAGTACAACTACTCAAGAGGAAGATGGCTGTAGCTGCCGATTTCCAGA 780
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 800 ATTTATGAGACCAGTACAACTACTCAAGAGGAAGATGGCTGTAGCTGCCGATTTCCAGA 859
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Qy 781 AGAAGAAGAAGGAGGATGTGAACTGTGAAATGGAAGTCAATAGGGCTGTTGGGACTTT 838
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 860 AGAAGAAGAAGGAGGATGTGAACTGTGAAATGGAAGTCAATAGGGCTGTTGGGACTTT 917
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

3. Conclusion

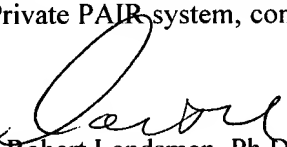
ml
8.15.07
 A. Claims 27 and 30 would be allowable if rewritten in independent format as product-by-process claims. *Currently, These claims are objected to since they depend from rejected claims.*

Advisory information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Landsman whose telephone number is (571) 272-0888. The examiner can normally be reached on M-F 10 AM – 7 PM (eastern).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao at 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


 Robert Landsman, Ph.D.
 Primary Examiner
 Art Unit 1647